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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/449,643	11/30/1999	JAMES WICHELMAN	10001192	6526

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EXAMINER	
GUTIERREZ, ANTHONY	
ART UNIT	**PAPER NUMBER**
2857	

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H-A

Office Action Summary	Application No.	Applicant(s)	
	09/449,643	WICHELMAN ET AL.	
	Examiner	Art Unit	
	Anthony Gutierrez	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 November 1999* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 14-16, 18, 21, 22, 24, and 25, are rejected under 35 U.S.C. 102(e) as being anticipated by Schwartzman et al. (US Patent 6,385,773 BI).

Schwartzman et al. discloses a method that includes the use of a computer readable medium having a program for monitoring electrical signals (col. 8, line 66-col. 9, line 11) communicated along a plurality of nodes (Figures 1 and 2A, element 108) comprising testing communication of the signals on the nodes by conducting a test plan, said test plan prescribing measurement of at least one test on at least one node (col. 9, line 59-col. 10, line 14, and Fig. 3, box 302); comparing the results from said one test with a user definable alarm time limit (Fig. 3, boxes 304, 306, and 308); and performing a failure time spectrum scan, using a spectrum analyzer, on said one node when said test results exceed said alarm limit (Fig. 3, box 310), said failure time spectrum scan representative of power versus frequency over the frequency spectrum of said node (col. 6, lines 7 and 8, col. 9, lines 3-7, and col. 10, lines 21-24). Schwartzman further implies storing the scan in a database and adjusting the start and stop frequencies of

the scan based on the channel under test at the time the alarm was exceeded (col. 2, lines 43-52, and col. 10, line 59-col. 11, line 6).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 6, and 11- 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartzman et al. (US Patent 6,385,773 B1) in view of Chen (US Patent 6,570,913 BI).

As to claims 1, 2, and 1 1-13, Schwartzman et al. discloses features of the claimed invention as addressed with respect to claims 14-16 and 18 above. Schwartzman further implies the use of a switch capable of connecting one of said nodes with the spectrum analyzer (col. 5, lines 9-15 and col. 11, lines 21-23). While Schwartzman discloses a spectrum analyzer that is representative of power amplitude versus frequency as addressed above, Schwartzman et al. does not specifically state that a plot is generated.

Chen, however, specifically shows a generated plot of power amplitude versus frequency (Fig. 4A). Chen uses this plot to determine the carrier-to-noise ratio threshold in order to select a free band set (col. 11, lines 6-38).

It therefore would have been obvious to one of ordinary skill in the art at the time of invention to actually generate the plot of amplitude versus frequency from the data obtained from the spectrum analyzer to allow a user access to the information in a meaningful way in order to more accurately select a noise free band.

As to claim 3, Schwartzman et al. discloses that the scan is performed over the entire frequency spectrum of the node (col. 10, lines 21-24).

As to claim 4, Schwartzman et al. discloses that the nodes are part of a cable television network (col. 6, lines 54-57).

As to claim 6, Schwartzman discloses that the test is selected from the group consisting of total node power, carrier-to-noise power, percent availability, average noise power channel power, and burst count (col. 9, line 53-col. 10, line 14).

5. Claims 5, 7, 8-10, 17, 19, 20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartzman et al. (US Patent 6,385,773 B1) in view of Chen (US Patent 6,570,913 B1), further in view of Sprenger et al. (US Patent 5,861,882).

The combination of Schwartzman et al. and Chen disclose generating a plot of power amplitude versus frequency for a spectrum analyzer scan performed on a system comprising a plurality of nodes as addressed above.

The combination does not specifically disclose the use of a graphical user interface.

Sprenger et al., however, teaches an integrated test measurement means that employs a graphical user interface (Title). The interface allows control of adjustable and selectable parameters to a user (col. 8, line 66-col. 9, line 21 and Fig. 4) and further

generates a plot of data for a spectrum analyzer (Fig 2 and col. 6, lines 51-67). The system provides for storing test configurations and settings that can be recalled for repeated testing (col. 12, lines 18-42). This system is meant to provide means to overcome the limitations taught by Sprenger et al., known in the art including providing test system that are entirely software programmable that can be reconfigured without the need to disassemble, rearrange and reconnect the test elements into a new test configuration by hard wiring or the like (col. 2, lines 43-49).

It therefore would have been obvious to one of ordinary skill in the art at the time of invention, in view of teaching of Schwartzman et al. that a headend of an HFC cable system can typically service 40,000 subscribers on up to 80 nodes (col. 2, lines 43-52), to employ the system of Sprenger et al. for the combination of Schwartzman et al. And Chen, in order to rapidly and easily reconfigure the test elements when scanning for frequency channels to transition to.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1, 14, and 15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 6 and 19 of U.S. Patent No. 6,522,987 B 1. Although the conflicting claims are not identical, they are not patentably distinct from each other because independent claims 1, 14, and 15 of the present application are generic to the method recited in claim 6 of the patent reference in view of claim 19 of the reference. That is claims 1, 14, and 15 fall entirely within the scope of claims 6 and 19 when it is understood that the percent availability result of claim 6 is determined by recording the node frequency spectrum amplitude over time as taught in claim 19. The step of comparing "a percent availability" is not specifically stated in the claims of the present application and therefore generic claims 1, 14, and 15 of the application are anticipated by the specific claims of the reference.

8. Claims 1, 14 and 15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7 of U.S. Patent No. 6,741,947 B1 in view of Chen (US Patent 6,570,913 B1).

Claim 7 of the patent reference discloses all the features of independent claims 1, 14, and 15, of the present application including the use of a spectrum analyzer, with the exception of generating a plot of amplitude versus frequency over the frequency spectrum of said node.

Chen, however, specifically shows a generated plot of power amplitude versus frequency (Fig. 4A). Chen uses this plot to determine the carrier-to-noise ratio threshold in order to select a free band set (col. 11, lines 6-38).

It therefore would have been obvious to one of ordinary skill in the art at the time of invention to actually generate the plot of amplitude versus frequency from the data obtained from the spectrum analyzer to allow a user access to the information in a meaningful way in order to more accurately select a noise free band.

Response to Arguments

9. Applicant's arguments filed 10/20/04 have been fully considered but they are not persuasive.

The Applicant's arguments with respect to all pending claims stem from the Applicant's contention that the reference relied upon in the previous Office Action, US Patent 6,385,773 to Schwartzman, fails to include the step of performing a failure time spectrum scan. The Examiner disagrees.

As addressed by the Applicant and cited by the Examiner in the previous Office Action, the reference teaches that a spectrum analyzer looks for a frequency channel with lower noise. In the broadest reasonable interpretation, the Examiner considers this to be a spectrum scan. This step is performed when a detected bit error rate exceeds a threshold bit error rate. The Examiner considers this to be a "failure time", in the broadest reasonable interpretation. The Examiner therefore maintains that Fig. 3, box 310, of the reference, as cited in the previous action, discloses this step.

Terminal Disclaimer

10. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

The Terminal Disclaimer is disapproved because the attorney on the Terminal Disclaimer is not of record.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Gutierrez whose telephone number is (571) 272-2215. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AG
Anthony Gutierrez

2/4/05

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